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## Research on Application of Multimedia Technology in College Physical Education

Shaoyan Chen<sup>a\*</sup>, Yunjian Xia<sup>b</sup>

<sup>a</sup>*Institute of Physical Education, Jiang Han University, Wuhan 430056, China*

<sup>b</sup>*Department of Physical Education, Wuhan Commercial Service College, Wuhan 430056, China<sup>a</sup>*

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### Abstract

Multimedia technology as an advanced technology in audio-visual education program is applied more and more widely, with the advancement of times and the development of science and technology, such as in college physical education. Nowadays the wide use of multimedia technology in college physical education changes traditional teaching method improves teaching effect and makes teaching procedure vivid. This paper discusses the application of multimedia technology in college physical education by documentary method, professor interview, mathematical statistics etc. It shows that multimedia technology has positive influence on college physical education, as it promotes scientific, advanced and vivid development of college physical education. However there are still problems in the application of multimedia technology in college physical education, for example, the problem in the links between multimedia teaching and traditional teaching and in the great influence of courseware on teaching effect. So it's necessary to accelerate multimedia technology development, strengthen the application of multimedia technology in college physical education, achieve a proper cooperation between traditional and multimedia teaching, enrich multimedia courseware and its effect.

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\* Corresponding author. Tel.: 18907121384  
E-mail address: [sunxiao1002@163.com](mailto:sunxiao1002@163.com)

## 1. Introduction

Psychological research proves that students who catch information by language can remember only 15 percent, by pictures 25 percent and both language and pictures 65 percent. But it's difficult for traditional teaching to present explain and demonstrate at the same time. It is traditional to explain essential of exercise and then demonstrate, which reduce students' information reception. It's multimedia technology which solves the problem and improves college physical teaching quality by combining language and vivid pictures together. So what is multimedia technology? It is high-tech integrating modern computer network technology and phonotype and videotape disposal technology, which can dispose lots of data with clear and speedy pictures. Besides multimedia technology has the following feature: effective disposal of sounds, phonotype and videotape, cartoon and teaching assistant information. Therefore we can say that multimedia technology plays a significant role in the future college physical education development.

## 2. Results and Analysis

### 2.1 *The Feature of Multimedia Technology Education*

#### 2.1.1 Speedy Data Expression and Vivid and Direct Teaching Subjects

Multimedia technology can transmit more data of higher quality than traditional medium in unit time and limited area. Besides it's possible to dispose and express much data including both pictures and words, which offers students convenience to conceive words data and understand teaching objects. Because of fast and efficient disposal of words, sounds, pictures and cartoons and its simulation, multimedia technology makes teaching more vivid and direct, which is not caught up by traditional medium.

#### 2.1.2 Rich Network Resource and Better Knowledge Renewal

Multimedia technology reflecting science development is the combination of computer network technology and phonotape and videotape diaposal technology. By multimedia technology vivid teaching courseware can be made after collecting, choosing and diaposing data related to teaching subjects. It is the surport of network technology which provides us such rich network resource and latest information to renovate our knowledge and master the development tend of subject knowledge.

### 2.2 *The Function of Multimedia Technology Application in College Physical Education*

#### 2.2.1 Improving Teaching Quality

Traditional physical teaching makes use of language and action demonstration to transmit action, technology or skills, while multimedia technology makes physical teaching simpler and much clearer. Pure language explanation or action demonstration can't achieve the best knowledge reception of students. But multimedia technology can transmit information by combining language signals and picture signals together with two advantages. Firstly it improves students' information reception effect and teaching quality. Secondly it deepens students' memory and understanding of knowledge with its vivid pictures, videoses and refined language. Thirdly multimedia technology application can unite recognition process, affective process and will process in teaching so as to stimulate students' inner study motive, improve teaching efficiency and teaching quality.

#### 2.2.2 Stimulating Students' Interest

Einstein used to say that “Interest is the best teacher.” It’s fast and solid for people with high interest to learn and master knowledge. People with interest lean to explore something or love some movement with positive influence that is improving study quality and effect. So college physical education should resort multimedia technology to arouse students’ attention for its feature of vivid picture, various projecting ways and rich multimedia expression. Besides its creative methods help students form imagination thinking and meet their psychological needs, which can stimulate their study interest, urge them to study by themselves and have a better effect.

#### 2.2.3 Improving Students’ Ability of Putting Forward, Analyze and Solve Problems

With the rapid social development, the standard of physical persons is improving, which requires college physical students’ higher ability to put forward, analyze and dispose problems. But the traditional physical teaching are not enough evidently. It’s difficult for students to get creative answers, but usual to answer what teachers have asked. The application of multimedia technology in college physical teaching assists physical teaching well with its traits of vividness, directness, combination of words and pictures and rich colors, which has changed the boring and stiff traditional teaching. What’s more it’s clear for students to recognize the structure and characteristics of technique action, form action conception and promote perceptual knowledge to conceptual knowledge because of novelty, unusual and interesting physical teaching. So it’s a must to stimulate students’ several senses and interest effectively, improve their observation ability and expand their thought, which makes it easy to discover, analyze and dispose problems.

#### 2.2.4 To Lower College Physical Teaching Difficulty

During physical teaching process lots of skills, technique and action structure are very complex and some are required to be finished immediately, which increases physical teaching difficulty. Although in college physical teaching, physical teachers explain and demonstrate repeatedly, it’s still difficulty for students to recognize the key point of the whole skill and technique procedure, which makes it hard to master the main point and use flexibly during exercises. The problems mentioned above can all be solved by multimedia technology, because of its following features: vivid expression of outline, main points and difficulties of skills; proper action decomposition; demonstration of action freeze frame, slowing and magnification according to teaching requirement; and broadcasting perfect sportsman’s action to demonstrate. After the application of multimedia technology in college physical teaching, knowledge transmission ways are broadened and it is better and quick for students to master action difficulty and key points for its exact and normative action. Besides students can study interestingly with fewer difficulties, which lessens college physical teachers’ burden and reduces teaching difficulties.

### 2.3 The Problems in the Application of Multimedia Technology in College Physical Teaching

#### 2.3.1 The Serious Influence of Courseware Quality on Teaching Effect

The main form of multimedia technology application in college physical teaching is broadcasting multimedia courseware, so the quality of multimedia courseware influences class quality and effect directly. A not well programmed multimedia courseware will not increase teaching quality but confuse students. So what are required to make a perfect and practical multimedia courseware? We should say that its development requires several parts’ cooperation, such as high qualified developer and its organizer possessing program ability, higher physical theories and physical teaching.

#### 2.3.2 The Influence of Traditional Physical Teaching

There are still many old teachers with little computer knowledge among college physical teachers, who are accustomed to traditional physical teaching theories and against new things a little. So it is hard for them to use multimedia technology as they know and master so little about it. What they emphasize

are body exercises and boring theory class, which influences the spread and development of multimedia technology application in college physical teaching.

### 2.3.3 To Ignore Teaching Subject

Teaching as a special recognition activity, is the combination of teachers' teaching and students' learning. So its subjects are teachers and students. Physical teaching is the interaction between teachers and students while multimedia technology just plays an assistant role as a teaching method. But the function of multimedia technology in physical teaching is magnified by many teachers who substitutes people by multimedia or courseware. In this way multimedia technology becomes the teaching subject, which ignores people's function as teaching subject and causes students' insulation. The problem mentioned above is a wrong region of multimedia technology application in college physical teaching.

## 3. Conclusions

**3.1** Multimedia technology can produce and dispose words, language, pictures and videos better with speedy expression and rich network resource, which favors knowledge renovation.

**3.2** Multimedia technology improves physical teaching quality and effect a lot with various functions. Its lively language and vivid pictures can arouse students' attention and stimulate students' interests, which is opposite to stiff traditional teaching. Besides multimedia technology can expand students' thinking and improve their ability to put forward, analyze and dispose problems. College physical teaching becomes easier because multimedia technology can slow, freeze and magnify videos and pictures, which make it simple to explain high difficult and new learning actions with exact action presentation.

**3.3** Although the influence of multimedia technology on college physical teaching is great, there still exist some problems. Firstly traditional physical teaching theories interfere multimedia technology application to some extent. Secondly multimedia courseware quality plays an important role in multimedia teaching. Once the courseware is not good, teaching effect is surely reduced. Finally lots of college physical teachers exaggerate the function of multimedia technology in college physical teaching while ignore people's subject effect.

## 4 Suggestions

**4.1** On one hand, college physical teachers should emancipate the mind and improve their ability of using computer in order to operate multimedia technology well, and on the other hand college physical teaching should emphasize multimedia technology application and organize teachers to attend multimedia technology training.

**4.2** College physical teaching should improve multimedia courseware quality by making courseware collectively and cultivate professors.

**4.3** College physical teaching should regard multimedia technology as an assistant instrument, master the essence of physical teaching and make full use of physical teaching subject's position, but not rely too much on multimedia technology.

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